

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION (SDRWQCB)**

SUPPLEMENTAL ENVIRONMENTAL PROJECT APPLICATION FORM

Project Requested by City of San Diego

Name of Project Rose and Tecolote Creeks Water Quality Improvements

Date of Request July 23, 2001

Point of Contact Karen Henry

Phone (619) 525-8647 **E-Mail** kqh@sdcity.sannet.gov

Project Summary:

In recent years, Mission Bay has been subject to recurrent postings due to pollution. Over 80 percent of the tributary area flows to Rose and Tecolote Creeks before discharging into Mission Bay. Using both new data and data collected in the past, best management practices (BMP) or structural controls (e.g. vegetated swales & strips, infiltration basins, wet ponds, constructed wetlands, filtration systems) can be developed to address the pollutants of concern. Typical pollutants of concern include metals, bacteria, hydrocarbons (oils & grease), and suspended solids.

This project will implement best management practices (BMPs) and construct structural controls at various locations within the watershed. The specific project locations within the watershed and type of technology used will be determined in the initial phase of the project.

Total Life Cycle Cost for the Project:

Project Overhead/Management	\$ <u>20,000</u>
Design/Consultation	\$ <u>112,000</u>
Construction/Implementation	\$ <u>624,000</u>
Long Term Maintenance/Oversight	\$ <u>44,000</u>

Total Project Cost \$ 800,000*

* Supplements \$2 million received from the State Water Resources Control Board

Watershed/Water Body/Location for Project (attach maps)

Mission Bay

Project Proposed Start Date and Time Line

The current schedule entails hiring a consultant by November 2001; begin a 5-month planning phase and initiate sampling for establishing a water quality baseline; complete

design of BMPs by January 2003; obtain environmental permits; perform construction between August 2003 and August 2004; conduct post-construction water quality monitoring until February 2007 to determine effectiveness of BMPs.

Organization Sponsoring Project (tax I.D. #) City of San Diego – I.D. #95-6000776

Name of Project Manager: Marnell Gibson, Senior Civil Engineer, Storm Water Pollution Prevention Program **Phone:** (619) 525-8609

Designated Project Trustee: City of San Diego, Mr. Ernie Anderson, Director of General Services

Description of Project Trustee capability or commitments to ensure that the project will be complete:

General Services is a department within the municipal corporation of the City of San Diego. General Services is responsible for the oversight of the Storm Water Pollution Prevention Program's organization and annual operating budget. General Services has the ability and authority to receive revenues and to disburse funds.

DETAILED PROJECT INFORMATION

1. PROPOSAL DESCRIPTION :

The proposed project would entail the following tasks:

1. Review and analyze existing water quality data and geography and identify appropriate BMP for addressing the pollutants of concern;
2. Develop a phased conceptual plan to improve water quality;
3. Obtain environmental approvals and necessary permits;
4. Based upon the approved conceptual plan, prepare plans and specifications for Phase 1 project;
5. Construct Phase 1 project; and,
6. Monitor water quality after construction to determine BMP effectiveness.

2. PROBLEM STATEMENT

Water monitoring data has shown that urban runoff and storm water are sources of pollutants to Mission Bay. The strategic design and installation of structural control BMPs along Rose and Tecolote Creeks would help remove pollutants before entering into Mission Bay.

3. HOW WILL THE PROJECT BENEFIT WATER QUALITY AND BENEFICIAL USES?

Various locations around Mission Bay have been identified as having reoccurring bacteriological exceedances that are a public health and environmental concern. By analyzing water quality data and implementing BMPs on Rose and Tecolote Creeks

(upstream of Mission Bay), we will reduce pollutant loads and ultimately beach closures in the receiving water body. While it is unlikely that the City will be able to eliminate all of our beach closures due to "natural" sources (e.g., birds, indigenous animals), the sources of the "hot spots" must be identified and eliminated to the best of our ability.

4. HOW WILL THE SUCCESS OF THIS PROJECT BE MEASURED?

The project requires that a report be prepared after construction is completed which will include pre- and post-construction water quality data and assessment of BMP effectiveness. Additionally, a reduction in beach closures and postings in Mission Bay will also measure the effectiveness of the implemented BMPs.

5. DETAILED WORK PLAN

Please include a detailed supplemental report of the proposal/project that includes the following:

a. Scope of work (work to be performed)

The proposed scope of work is outlined in the attached Project Plan. This project would supplement and enhance the detailed Project Plan.

b. Budget

Project Overhead/Management	\$ 20,000
Design/Consultation	\$ 112,000
Construction/Implementation	\$ 624,000
Long Term Maintenance/Oversight	\$ 44,000

Total Project Cost \$ 800,000*

* Supplements \$2 million received from the State Water Resources Control Board

c. Task descriptions

The attached Project Plan includes a detailed listing of the proposed project activities.

d. Methods and materials

Based on the water data collected, conceptual designs for site specific BMPs will be developed. It is unknown at this time what methods and materials will be implemented to construct the final design. It is anticipated that standard construction equipment will be used.

e. Resource needs

No special resources are anticipated at this time.

f. Regulatory needs

Although regulatory needs are not yet known at this time, it is anticipated that consultation with the Regional Water Quality Control Board, U.S. Army Corps of Engineers, U.S. Fish & Wildlife and California Department of Fish and Game may be necessary.

g. Schedule

The attached Project Plan includes a project schedule. Please note that we have already selected a consultant and are in the process of establishing an agreement, thus we have met the "assumed" start date of 6/01/01.

h. Work products and documents to be retained for records

Reports will be developed that will document data and evaluations. As-built drawings will result from any constructed BMPs. Structural BMPs may be in place and the City of San Diego will be responsible for maintenance and inspections.

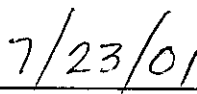
i. Other information about the proposed project that may be of interest to the SDRWQCB

None.

I certify that the information provided in this application is an accurate and complete report of the costs, scope of work and expectations of this proposed project I am submitting to the SDRWQCB.



SIGNATURE



Date

Attachments (2):

Project Plan

CIP Information Page and Map

**PROJECT PLAN
CITY OF SAN DIEGO
ROSE AND TECOLOTE CREEKS
WATER QUALITY IMPROVEMENTS**

Background:

Mission Bay is considered to be one of San Diego's most beautiful recreational areas and a unique aquatic facility. In addition, Mission Bay serves as the outlet for approximately 80 square miles of urbanized tributary area. The aesthetic quality and recreational benefits of Mission Bay have been periodically diminished in recent years due to the recurrent posting of "Contaminated Water" signs. Mission Bay is an impaired water body under Section 303(d) of the Clean Water Act. Over 80 percent of the tributary area flows to Rose and Tecolote Creeks before discharging into the Bay. For the past 7 years, the water quality in Tecolote Creek has been monitored as a mass loading station in the NPDES storm water monitoring program.

Project Description:

With existing storm water monitoring program data, best management practices (BMP) or structural controls (e.g. vegetated swales & strips, infiltration basins, wet ponds, constructed wetlands, filtration systems) will be developed to address the pollutants of concern within specific "focus areas" within the Tecolote and Rose Creeks basins. Typical pollutants of concern are metals, bacteria, hydrocarbons (oils & grease), and suspended solids. Specific project locations within the watershed and type of technology used will be determined in the initial phases of the project.

Project Status:

This project has not started.

Scope of Work Summary by Phase

1. Hire Consultant
2. Planning
3. Preliminary Engineering
4. Water Quality Baseline
5. Design
6. Environmental Clearance & Permits
7. Project Bidding and Contract Award
8. Construction
9. Post-Construction Water Quality Monitoring

**PROJECT PLAN
CITY OF SAN DIEGO
ROSE AND TECOLOTE CREEKS
WATER QUALITY IMPROVEMENTS**

Project Activities:

Phase 1 – Hire Consultant

- 1.1. Solicit Statements of Qualifications
- 1.2. Evaluate SOQ's and determine a short list
- 1.3. Interview short listed consultants
- 1.4. Select consultant
- 1.5. Negotiate contract
- 1.6. Contract approval by City Manager or Council

Phase 2- Planning

- 2.1 Review the existing water quality data (wet and dry weather) within the Rose and Tecolote Creek Watersheds.
- 2.2 Obtain map of contour topography of the study area. Determine major and minor watershed boundaries, land uses, and drainage facilities (where available) and locations of the existing water quality data. Land use data will be confirmed by review of aerial photographs.
- 2.3 Use the compilation of watershed boundary and land use information with published pollutant load data into a probable pollutant loading map to help delineate water quality hot spots within the watershed.
- 2.4 Determine the pollutants of concern by considering the receiving water (Mission Bay) and land use based upon record data for each Phase I site.
- 2.5 Identify potential areas for water quality enhancement.
- 2.6 Assess the ownership and availability of the possible water quality enhancement areas. If these areas are public, the appropriate public agencies and/ or private owners will be consulted to determine the viability of these sites.
- 2.7 Consultant recommends and prioritizes possible improvement sites. The City will determine the locations of Phase 1 projects.

**PROJECT PLAN
CITY OF SAN DIEGO
ROSE AND TECOLOTE CREEKS
WATER QUALITY IMPROVEMENTS**

Phase 3 – Water Quality Baseline

- 3.1 Develop a monitoring plan and obtain dry and wet weather samples at Phase I sites prior to improvements.
- 3.2 Coordinate with dry and wet weather monitoring by others.

Phase 4 – Preliminary Engineering

- 4.1 Evaluate Best Management Practices (BMPs) appropriate for each specific site.
- 4.2 Develop conceptual designs for site BMPs.
- 4.3 Prepare opinions of probable cost for each site.

Phase 5 - Design

- 4.1 Develop plans, specifications, and estimates for Phase I project site improvements.
- 4.2 Coordinate with impacted parties
- 4.3 Prepare post-construction water quality monitoring plan

Phase 6 – Environmental Clearance & Permits

- 6.1 Obtain environmental clearance for project improvements.
- 6.2 Obtain agency permits for project improvements

Phase 7 – Project Bidding and Contract Award

- 7.1 Advertise for bids
- 7.2 Determine lowest responsible bidder
- 7.3 Award Contract to lowest responsible bidder

**PROJECT PLAN
CITY OF SAN DIEGO
ROSE AND TECOLOTE CREEKS
WATER QUALITY IMPROVEMENTS**

Phase 8 – Construction

- 6.1 Preconstruction meeting
- 6.2 Construction & Contract Administration
- 6.3 Project acceptance

Phase 9 – Post- Construction Water Quality Monitoring

- 9.1 Implement water quality monitoring plan.
- 9.2 Prepare a report including the pre and post- construction water quality data and assessment of BMP effectiveness. The report shall include an executive summary, introduction, conclusion, and recommendations.

**PROJECT PLAN
CITY OF SAN DIEGO
ROSE AND TECOLOTE CREEKS
WATER QUALITY IMPROVEMENTS**

TENTATIVE PROJECT SCHEDULE

Assuming 6/1/01 start date

<u>Phase/ Description</u>	<u>Duration</u>	<u>End Date</u>
1. Hire Consultant	6 months	11/30/01
2. Planning	5 months	4/30/02
3. Water Quality Baseline	15 - 24 months*	
4. Preliminary Engineering	3 months	7/31/02
5. Design	6 months	1/31/03
6. Environmental Clearance & Permits	6 - 24 months**	
7. Project Bidding & Contract Award	6 months	8/31/03
8. Construction	12 months	8/31/04
9. Post-Construction Water Quality Monitoring	30 months	2/28/07***
TOTAL	68 – 86 months	

*Water Quality Baseline Phase will begin after the Planning Phase & is concurrent with Predesign, Design, Environmental Clearance, & Bidding Phases

**Environmental Clearance & Permits Phase duration will vary based upon the location & complexity of the BMPs and will determine the completion date. This phase will begin after the Preliminary Engineering Phase, is concurrent with the Design Phase. Project bidding will not start until Environmental Clearance & Permits Phase is completed.

*** Completion date assumes Environmental Clearance & Permits completed within 6 months

CITY OF SAN DIEGO
CAPITAL IMPROVEMENTS PROGRAM

CIP NO: 32-0050.0

TITLE: ROSE & TECOLOTE CREEKS WATER QUALITY IMPROVEMENTS

COUNCIL DISTRICT: 1,5,6
COMMUNITY PLAN: 8,21,36,55
INITIAL SCHEDULE: 00/01

DEPARTMENT: Environmental Services
EXPENDITURE: 2,000,000
IMPROVEMENT TYPE: Water Quality
ENGR/CONSTR:

REVENUE SOURCE	EXPENSE/CUM	CONT APPROP	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
P 60,000 STATE	\$	\$	\$ 60,000	\$	\$	\$	\$	\$
D 540,000 STATE				\$ 540,000				
C 1,400,000 STATE					\$ 1,400,000			
TOTAL 2,000,000	\$	\$	\$ 60,000	\$ 540,000	\$ 1,400,000	\$	\$	\$
L=Land Acquisition P=Preliminary Design D=Design C=Construction R=Reimbursement F=Furnishings M=Mitigation A=Apparatus								

Description: This project implements Best Management Practices (BMP's) or structural controls (e.g. vegetated swales & strips, infiltration basins, wet ponds, constructed wetlands, filtration systems) to address the pollutants of concern within the Tecolote and Rose Creek watersheds. Specific project locations within the watershed and type of technology used will be determined in the initial phases.

Justification: The aesthetic quality and recreational benefits of Mission Bay have been periodically diminished in recent years due to the recurrent posting of "Contaminated Water" signs. Mission Bay is an impaired water body under Section 303(d) of the Clean Water Act. Over 80 percent of the tributary area flows to Rose and Tecolote Creeks before discharging into the Bay. Structural controls in addition to pollution prevention and source controls are desired to address Mission Bay pollution.

Scheduling: Preliminary design is scheduled to begin in Fiscal Year 2001. Design is scheduled to begin in Fiscal Year 2002. Construction is scheduled to begin in Fiscal Year 2003. Post-Construction water quality monitoring is scheduled to begin in Fiscal Year 2004.

Relationship to General and Community Plans: This project is consistent with the City's Progress Guide and City's General Plan.

Operating Budget Effect: The operating budget effect will be determined upon completion of design.

